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THE PLANT DISEASE BULLETIN

Issued By

The Plant Disease Survey

VOLUME II. NUMBER 4.

June 15, 1918.

BUREAU OF PLANT INDUSTRY

UNITED STATES DEPARTMENT OF AGRICULTURE

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ANNOUNCEMENT

On June 1 six newly appointed field assistants commenced work with the Plant Disease Survey. Three of these men, namely Professors Gilman, Stahl and Otis, are engaged in a survey for root rot diseases of corn under the supervision of Dr. G. N. Hoffer, agent for the Office of Cereal Investigations. The work was started in the south and will progress northward as the crop matures. Most of the observations will be made at about the time the plants are tasseling. Collaborators are asked to keep a watch for corn root troubles and to report the same to this office. Their cooperation with the field men when the latter are in their states will also be much appreciated.

The other three men are engaged in maintaining a watch service for late blight of potatoes in Michigan, Wisconsin and Minnesota and in making observations on other diseases of potatoes, cereals, fruit and truck crops. Conditions in the three states mentioned make the late blight problem a different one from that in the eastern and northeastern part of the country. Here outbreaks of Phytophthora are of less frequency than in the latter sections, but when an outbreak does occur the damage is enormous. For this reason spraying as a yearly proposition is not profitable. It is believed therefore that the best solution of the problem is to maintain an efficient watch service for the first occurrence of the disease.

ALFALFA

Winter Injury due to Low Temperature.

New York: (Report of Chas. Chupp, May 24) From the reports of 48 observers in 19 counties it was found that the average amount of winter injury to alfalfa for the state amounts to about 11.5%.

Blight caused by Bacterium medicaginis.

California: (Report of F. R. Jones of the Office of Cotton and Truck Disease investigations, May 6.) "The most interesting event of this past week has been the finding of bacterial blight of alfalfa here in the Sacramento Valley."

ARTICHOKE

Brown Rot caused by Botrytis sp.

California: (Market inspection at Buffalo, 2 cars.) Infection 41% in first car with many boxes entirely worthless; 10 to 75% infection in second car.

BEAN, Snap

Bacterial Blight caused by Bacterium phaseoli.

Texas: "Very prevalent, about 10% loss." -- J.J.T.

(Market inspection at Detroit, 210 hampers.) Infection 25%.

Rot caused by Sclerotinia libertiana.

Alabama: (Market inspection at Cincinnati, 350 hampers.) "About 1/2 of the hampers show some decay, varying from a few beans to 10% of the hamper."

Louisiana: (Market inspection at Cincinnati, Cleveland, St. Louis, 2 cars and 99 hampers.) Infection ranging from 5 to 50%, average infection 30%.

Texas: (Market inspection at Detroit, 210 hampers.) A few hampers leaky due to infection of the pods; all hampers showing infection in nests extending throughout hampers.

Anthracnose caused by Colletotrichum lindemuthianum.

Texas: "Disease present but not very serious." -- J.J.T.

BEET

Rot caused by Sclerotinia libertiana.

Illinois: (Market inspection at Detroit, 150 crates.) Tops of beets in all of the crates show rotting caused by this fungus.

BLACKBERRY

Orange Rust caused by Gymnoconia interstitialis.

Georgia: "The orange rust of blackberry is very common at present." -- J.B.B.

CABBAGE

Soft Rot probably caused by Bacillus carotovorus.

Alabama: (Market inspection at Kansas City and Buffalo, 2 cars.) Infection ranged from 7 to 40%. In one car infection found in first stages on outer leaves only, in the other car rotting was severe.

Florida: (Market inspection at Baltimore, Buffalo and Chicago, 6 cars.) Infection from very slight to 9%, showing to a depth of 2 to 9 leaves, heads in many cases were slimy.

Illinois: (Market inspection at Cleveland, 1 car.) Decay from soft rot very irregular, varying from heads requiring trimming of from 5 to 8 outer leaves to total loss.

Kentucky: (Market inspection at Cincinnati, 125 crates.) Fourteen percent of rot showed to a depth of 2 to 3 leaves; 24% decayed in the heart at the base of head.

Missouri: (Market inspection at Omaha, 1 car.) Occasional head in all crates slimy, generally outer 2 to 4 leaves slightly affected.

New York: (Market inspection at St. Louis, 1 car.) All the heads in the upper half of load showed from 2 to 5 badly decayed outer leaves and an occasional slimy head, through the remainier of load a good percentage of the heads showed 1 to 2 slightly decayed outer leaves.

Rot caused by Botrytis cinerea.

Florida: (Market inspection at Baltimore, 4 cars.) Infection ranging from 10 to 40% of the contents of the crates, affecting from 2 to 7 leaves of each head. Average infection for the four cars 21%.

Leaf Spot caused by Alternaria brassicae.

Florida: (Market inspection at Baltimore, 3 cars.) Leaf spot infection ranged from 13 to 25%, showing to a depth of from 2 to 9 leaves.

Virginia: (Market inspection at Boston, 1 car.) Leaf spot infection 44%.

Black Rot caused by Bacterium campestre.

Michigan: (Market inspection at Detroit, 500 hampers.) Two to four outer leaves affected on from 10 to 12% of heads.

Yellows caused by Fusarium conglutinans.

Texas: "Fairly prevalent, 2% loss." -- J.J.T.

Downy Mildew caused by Peronospora parasitica.

Texas: "Peronospora parasitica very serious on cabbage in seed beds." -- J.J.T.

COTTON

Angular Leaf Spot caused by Bacterium malvacearum.

Georgia: "Angular leaf spot made its appearance in Lowndes County on May 15 and is spreading rapidly. No doubt considerable damage will be done. Sea Island cotton is the principal variety grown." -- J.B.B.

CUCUMBER

Anthracnose caused by Colletotrichum lagenarium.

Alabama: "One badly infected field noted in Baldwin County in May, leaves infected only." -- G.L.P.

Mosaic (cause undetermined).

Louisiana: (Report of S. P. Doolittle, Racine, Wis., of the Office of Cotton and Truck Disease Investigations, May 28.) "The large amount of cucumber mosaic that is appearing on the market from Louisiana is of especial interest. Several good sized shipments contained at least 50% mosaic."

Bacterial Blight caused by *Bacillus tracheiphilus*.

Texas: "Present, about 1% loss." -- J.J.T.

LETTUCE

Soft Rot probably caused by *Bacillus carotovorus*.

California: (Market inspection at Baltimore, 1 car.) Rot showed in varying degrees, mostly requiring trimming of from 14 to 50% of outer leaves to make stock salable.

Drop caused by *Sclerotinia libertiana*.

Arkansas: "A considerable amount of rot due to both *Sclerotinia libertiana* and Botrytis, amounting to perhaps a loss of 5% in home gardens. This loss is not felt because of over-planting." -- J.L.H.

Maryland: "Lettuce drop is confined mostly to early lettuce in the greenhouses. In some parts of Baltimore considerable loss in incurred from this disease." C.E.T.

Stem Rot caused by *Rhizoctonia*.

Maryland: "Examination of head lettuce in the section about Baltimore City indicates considerable stem rot, ranging from 1 to 5%." -- C.E.T.

ONION

Leaf Spot caused by *Macrosporium sarcinula*.

Louisiana: "*Macrosporium sarcinula* has been quite abundant but loss has been less than usual. Probably 40 to 50% of the seed onion crop in the LaFourche region has been destroyed by this trouble. This is less than usual. The bulb crop has also showed some infection." -- C.W.E.

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Downy Mildew caused by Peronospora schleideniana.

Louisiana: (Report of Mr. D. C. Neal of the Office of Cotton and Truck Disease Investigations, May 28.) "Downy mildew is causing a great deal of damage to the seed onion crop in the southern part of the state."

Black Mold caused by Sterigmatocystis nigra.

Indiana: (Market inspection at New York, 330 sacks.) Infection 25%, confined to outer layers.

Missouri: (Market inspection at Baltimore and Philadelphia, 2 cars.) Infection 8% and 32% respectively.

New York: (Market inspection at New York, 1 car.) Infection of black mold 58%, generally limited in area.

Pennsylvania: (Market inspection at Philadelphia, 2 cars.) Black mold affected 11 and 13% respectively of the onions, covering from one-half to entire outer surface.

Texas: (Market inspection at Milwaukee, Philadelphia and Chicago, 10 cars.) Infection ranged from slight to 70%, in some cases affecting from slight area on outer scales to the entire outer surface.

Pink Rot (cause undetermined).

Texas: "Pink rot is the only onion trouble prevalent in the Rio Grande Valley, especially in Webb County. Loss about 15% of crop." -- J.J.T.

PEA

Powdery Mildew caused by Erysiphe polygoni.

Georgia: "Considerable powdery mildew of the garden peas has been reported from the vicinity of Thomasville. In many cases the vines are completely destroyed." -- J.B.B.

Root Rot caused by Thielavia basicola.

Arkansas: "The Thielavia root rot is in the northwestern part of the state, apparently associating garden peas and white clover in its attacks, and being more severe where sod has been broken to plant garden." -- J.L.H.

Root Rot caused by Fusarium sp.

Maryland: "Three fields examined had approximately 100% of the plants diseased with the root rot. These fields have been in peas several years in succession. Fields planted for the first time have little or no root rot. Average infection of fields of state will probably run between 15 and 30%." --C.E.T.

Blight caused by Ascochyta pisi.

South Carolina: "Frequently noticed but causing little loss." -- H.W.B.

PEACH

Bacterial Leaf Spot caused by Bacterium pruni.

Delaware, Kent County: (Reported by T. F. Manns, May 28.) This disease is becoming quite common; damage moderate, reduction in yield about 1/2% for this locality.

Scab caused by Cladosporium carpophilum.

Alabama: (Market inspection at Detroit, 420 6-basket crates.) Three percent of stock severely infected.

Brown Rot caused by Sclerotinia cinerea.

Alabama: (Market inspection at Detroit, 420 6-basket crates.) Brown rot occurred in all parts of load, starting at apex of fruit and attacking firm ripe and full ripe fruit alike. Infection 25%.

Georgia: (Market inspection at New Orleans, 1 car.) Infection from brown rot 40%, ranged from small discolored areas to entire specimen and showed a white, fluffy growth of the fungus.

New Jersey, Vicinity of Salem: (Reported by L. M. Massey, June 4.) Found on twigs in orchard of 1300 trees. Caused a reduction in yield of about 10%.

Winter Injury.

New Jersey, Vicinity of Hammonton: "One large orchard had over 60% of the trees severely injured, some of which were practically dead and others dying. Trees injured throughout this section at just below the surface of the soil." -- L.M.M., (May 20.)

Nematodes.

Georgia: "Many cases of nematodes on peach have been reported, in some cases as many as 15 or 20 trees in a patch were killed outright. The first reports came in about April 1." -- J.B.B.

PEAR

Fire Blight caused by *Bacillus amylovorus*.

Georgia: "Fire blight of pears is very general over the state. It is worst in the southern part. Very often entire trees are killed and it is common to find 50% of the young growth killed. The first report came in about May 1 although I am certain from observation that the disease made its appearance about April 1." -- J.B.B.

PEPPER

Soft Rot probably caused by *Bacillus carotovorus*.

Florida: (Market inspection at New York, 276 crates.) Twenty-five to seventy percent soft rot. Slime from rotted specimens rendered sound stock wet and unsightly.

PLUM

Wilt caused by *Lasiodiplodia triflorae*.

Georgia: "Wilt of plum has appeared generally over the state. One of our collaborators estimated that at least 90% are affected. The disease was reported first about April 15." -- J.B.B.

POTATO, Early.

Late Blight caused by *Phytophthora infestans*.

Florida: (From report of H. E. Stevens, June 1.) Crop reduction difficult to estimate, probably 5%.

Market inspection at Cincinnati, Philadelphia and Cleveland, 4 shipments, 627 sacks and 166 barrels.) Infection varied from slight to 22% with decayed spots from small to one inch in diameter. In many cases secondary soft rot was affecting the tuber.

Louisiana: (From report of C. W. Edgerton, June 1.) Late blight reported in May. "This is the first authentic report of this disease in this state."

Early Blight caused by Alternaria solani.

Florida: (From report of H. E. Stevens.) Very common in southern Florida, traces in central and northern counties. Disease probably somewhat more severe than usual this year.

South Carolina: (From report of H. W. Barre, June 1.) Found in all fields but no estimate of damage has been made.

Stem Rot caused by Rhizoctonia solani.

Florida: (From report of H. E. Stevens, June 1.) Estimate of percentage of crop reduction probably less than 1%.

South Carolina: (From report of H. W. Barre, June 1.) This disease is especially common in some fields, while others are practically free.

Texas: (From report of J. J. Taubenhaus, June 1.) Disease not severe this year. About 0.1% crop reduction on this account.

Bacterial Wilt caused by Bacillus solanacearum.

Florida: (Market inspection at Chicago and Baltimore, 2 1/2 cars.) Infection ranged from 4 to 8% in the form of a brown discoloration on cut tubers.

(From report of H. E. Stevens, June 1.) Very common at Hastings, Bunnell, Plant City and Manatee County. Much more severe than in last four years, up to 75% of plants being affected. Flagler, Clay, St. Johns and Volutia Counties, loss probably 5% of crop due to this disease.

Louisiana: "Apparently has caused but little loss." -- C.W.E.

South Carolina: "Above disease is much more severe in some fields than in others. Do not think they will average as much as 2% infection." -- H.W.B.

Scab caused by Actinomyces chromogenus.

Louisiana: "Potato scab has been about the same as usual, low percentages in some fields and slight in others. Loss will probably be from 3 to 5%. C.W.E.

Texas: "Common scab very abundant, loss about 1%. Found everywhere in Texas." J.J.T.

Mosaic (cause unknown).

Georgia: "Irish potato mosaic has been reported from Richmond, Chatham, Fulton and other counties. Occasionally considerable damage is done. The Bliss is badly affected while the Irish Cobbler seems to be quite resistant. Reports of the presence of the disease have been coming in since April 25." J.B.B.

STRAWBERRY

Rot caused by Botrytis sp.

New Jersey: "Rot due to Botrytis sp. abundant." -- M.T.C.

Leaf Spot caused by Mycosphaerella fragariae.

Wisconsin: "Mycosphaerella the only thing seen to date (June 1) and less than usual of this. Many beds entirely free from it and none seem badly diseased." -- L.R.J.

Leak caused by Rhizopus nigricans.

Missouri: (Market inspection at Detroit, 448 24-qt. crates.) Infection in fourth tier showed from 50 to 60% decay; remainder of tiers showed about 15%.

Rot probably caused by Patellina sp.

Arkansas: (Market inspection at Memphis, 20 24-qt. crates.) This rot was found affecting 1/4 to 1/2 of berries in several cups.

SWEET POTATO

Black Rot caused by Sphaeronema fimbriatum.

Georgia: "Mr. McClintock reports that black rot is showing up in many of the sweet potato seedbeds through the southern part of the state. These are cases where the seed potatoes were neither selected nor treated." -- J.B.B.

TOMATO

Early Blight caused by Alternaria solani.

Florida, West Coast Region: (Report of I. C. Jagger of the Office of Cotton and Truck Disease Investigations, April 24.) "All tomato fields showed some Alternaria blight on the lower leaves and stems, which had so far caused little injury to the crop but might become destructive before the end of harvesting."

Wilt caused by Fusarium sp.

Florida, West Coast Region: (Report of I. C. Jagger of the Office of Cotton and Truck Disease Investigations, April 24.) "Most fields showed 1-10% of the plants affected with Fusarium wilt."

Wilt caused by Bacillus solanacearum.

Florida: (Report of I. C. Jagger of the Office of Cotton and Truck Disease Investigations, April 24.) "Bacterial wilt was found in only one field, which was a two acre field on black hummock land cleared eighteen months ago, where a large percentage of the plants were diseased."

Anthracnose caused by Colletotrichum phomoides.

Florida: (Market inspection at Philadelphia and New Orleans, 3 cars.) Infection from slight to 15%, affected areas varying from small to 1 1/2 inch in diameter.

Blossom End Rot (cause undetermined).

Florida: (Market inspection at Philadelphia, 1 car.) Infection found on 8% of stock, affecting about 1/2 of surface.

Rot caused by Phoma destructiva.

Florida: (Market inspection at Buffalo, Rochester, Chicago, New York and Oklahoma City, 9 cars.) Infection ranged from 3 to 22%, much of stock showing decay was practically worthless and unfit for food.

Buckeye Spot caused by Phytophthora terrestria.

Florida: (Market inspection at Rochester, Philadelphia, New Orleans and New York, 5 cars.) Infection ranged from 2 to 17%; average infection about 6%. In one car 4% of the tomatoes were unfit for food.

Soft Rot caused by Rhizopus nigricans.

Florida: (Market inspection at Baltimore, Cincinnati and St. Louis, 4 cars.) Infection ranged from 5 to 21%, in the latter case most of it involved a larger part of the whole tomato.

Nail Head Spot caused by Alternaria solani.

Florida: (Market inspection at New York, Buffalo, Philadelphia, Baltimore, Rochester, Chicago, Cincinnati, Spokane and Oklahoma City, 23 cars.) Infection ranged from 1 to 80%; average infection about 12%.

WATERMELON

Anthracnose caused by Colletotrichum lagenarium.

South Carolina: (Market inspection at Dallas, 350 melons.) All melons badly spotted, spots ranging from 1/2 to 1 inch in diameter and covering from 2/3 to entire surface of melon.

WHEAT

Bunt caused by Tilletia foetens and T. tritici.

Arkansas: "Wheat is showing a rather high infection of bunt in northwestern Arkansas, infection in commercial fields being from 5 to 20%." -- J.A.E.

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